REMARKS

I. Office Action Summary

In the final Office Action dated April 20, 2007, the Examiner presented rejections regarding claims 1-7 and 9-21. The Examiner rejected claims 5-9, 11-14, and 16-21 as being obvious under 35 U.S.C. §103(a) in view of the following combination of references:

Claims	**Prior Art Reference(s)**
1-7 and 10-14	Islam et al. (US 2003/0035430 A1) + Vairavan (US 2002/0083344 A1)
9	Islam et al. + Vairavan + Wilson et al. (US 4,292,465)
15	Islam et al. + Webb et al. (US 2002/0120741 A1)
16-21	Vairavan + Webb et al.

Claims 1-3, 5-7, 9, 11-13, 15-17, and 21 are currently amended. No new matter was added as a result. Claim 8 has been previously canceled.

II. Claim Rejections Under 35 U.S.C. §103(a)

Rejection of claims 1-7 and 10-14 as being obvious under Islam et al. in view of Vairavan.

Claim 1

Claim 1 recites, *inter alia*:

"receiving unanalyzed content at a local area network;

passing the unanalyzed content to a switch in the local area network;

analyzing the unanalyzed content at the switch and generating analyzed data; and

routing the analyzed data to a device in the local area network in communication with the switch, wherein the switch comprises a plurality of ports, and wherein analyzing the unanalyzed content at the switch comprises the switch scanning the plurality of ports and **applying a content analysis algorithm to each of the plurality of ports**."

Neither Islam et al. nor Vairavan teach or suggest applying a content analysis algorithm to **each** port. Paragraph 55, lines 1-3 and paragraph 70, lines 1-7 of Vairavan merely state that an inter/intra networking device 110 includes a packet processor 210 that performs multiple packet analyses and functions and a switching fabric 230 that includes multiple routing and switching tables that allow the switching fabric 230 to transmit packets to an appropriate destination ("the table will describe a port on which the packet should be transmitted"). There is no teaching or suggestion of actually applying a content analysis algorithm to each of the ports 115. Paragraph 67, lines 3-7 of Vairavan discloses that a system processor 215 of the inter/intra networking device 110 controls access to ports on the switching fabric 230 by initially configuring the ports as well as establishing security standards that may block certain packets from accessing the inter/intra networking device 110. However, controlling access to a port and an initial configuration of a port is not the same as applying a content analysis algorithm to each of the ports. The mentioning of establishing security standards does not specifically state that security algorithms are applied to each port.

Accordingly, the combination of Islam et al. and Vairavan does not teach all the features of claim 1. Therefore, claim 1 is allowable for at least this reason. Claims 2-7 and 9-11 depend from allowable claim 1 and, therefore, are allowable for at least this reason.

Claim 12

Claim 12 has been amended to recite, *inter alia*:

"transmitting port configuration instructions from the managed service provider network to the switch of the local area network, the port configuration instructions comprising instructions to configure a plurality of ports **on a port-to-port basis** at the switch to implement at least one content analysis function and to cause the switch to scan and apply the at least one content analysis function to **a selected port** of the plurality of ports."

Neither Islam et al. or Vairavan teach or suggest the ability to configure ports on a port-to-port basis wherein the configuration of a selected port includes applying at least one content analysis function to the selected port. The inter/intra networking device 110 of Vairavan concerns interconnecting multiple networks, and there is no mention of controlling the ports in a local area network on a port-to-port basis.

Also, neither Islam et al. nor Vairavan teach or suggest applying a content analysis function to the selected port. Paragraph 55, lines 1-3 and paragraph 70, lines 1-7 of Vairavan merely state that an inter/intra networking device 110 includes a packet processor 210 that performs multiple packet analyses and functions and a switching fabric 230 that includes multiple routing and switching tables that allow the switching fabric 230 to transmit packets to an appropriate destination ("the table will describe a port on which the packet should be transmitted"). There is no teaching or suggestion of actually applying a content analysis algorithm to a port 115, let alone a selected port 115. Paragraph 67, lines 3-7 of Vairavan discloses that a system processor 215 of the inter/intra networking device 110 controls access to ports on the switching fabric 230 by initially configuring the ports as well as establishing security standards that may block certain packets from accessing the inter/intra networking device 110. However, controlling access to a port and an initial configuration of a port is not the same as applying a content analysis algorithm to a selected port. The mentioning of establishing security standards does not specifically state that security algorithms are applied to a selected port.

Accordingly, claim 12 is allowable for at least these reasons. Claims 13 and 14 depend from allowable claim 12 and, therefore, are allowable for at least this reason.

Rejection of claim 15 as being obvious under Islam et al. in view of Webb et al.

Claim 15

Claim 15 recites, *inter alia*:

"establishing a communication link between a switch in each of a plurality of subscriber networks and an application management appliance of a managed service provider network via an external communications network;

transmitting one of instructions or update information for a content analysis application from the application management appliance to the switch in each of the plurality of subscriber networks; and

receiving performance metrics of the content analysis application from each of the plurality of subscriber networks, wherein the switch in each of the plurality of subscriber networks comprises a plurality of ports, and **wherein receiving performance metrics comprises receiving performance metrics for each of the plurality of ports in substantially real time**."

The combination of Islam et al. and Webb et al. does not teach receiving performance metrics for each port in substantially real time. Webb et al. discloses that management and tracking may be performed in real-time in regards to distributed interconnects for information management environments (Webb et al., paragraph 255, lines 13-18), but there is no mention of tracking performance metrics for each of a plurality of ports. Modifying the switch of Islam et al. would not teach receiving performance metrics for each port in substantially real time.

There is no motivation or suggestion to combine Islam et al. and Webb et al. and "common sense" would discourage the combination. In paragraph 4 of the background of Webb et al., there is an assertion that prior art solutions to alleviate network computing system bottlenecks are to spend more money and add more hardware. Webb et al. concerns a distributed interconnect to distribute functionality among processing engines of an information management system and/or processing modules. (Webb et al., Abstract). Adding the programmable switch of Islam et al. is contrary to the purpose of the Webb et al. invention that advocates a more efficient use of computing system resources (paragraph 55). The Examiner argues that the test of obviousness is what the combined teachings of the references would have suggested (Office Action, page 16), but "[i]t is improper to combine references where the references teach away from their combination." (MPEP § 2145).

Rejection of claims 16-21 as being obvious under Vairavan in view of Webb et al.

Claim 16

Claim 16 recites, *inter alia*:

> "**a billing server;**
>
> a plurality of ports **in communication with the billing server,** each of the ports configured for communication with a respective external device, each of the plurality of ports comprising:
>
> an interface connection adapted for connecting with a communication line of an external device;
>
> a processor in communication with the interface connection;
>
> a memory in communication with the processor;
>
> an application buffer in communication with the processor and the memory, wherein the application buffer contains logic operative on the processor to analyze a content of information passing between the external device and the port; and
>
> a communication bus in communication with each of the plurality of ports, the communication bus adapted to carry information between the plurality of ports, wherein the switch is configured to analyze the content of information passing through each of the plurality of ports,
>
> **wherein the billing server is operable to track charges for content analysis services and bill on a per port basis**.

None of the references teach or suggest a billing server that can track charges and bill on a per port basis. Paragraph 48, lines 1-7 of Vairavan mention an interface between a networking device 110 and a network administrator, and paragraph 16 of Islam et al. discloses that an administrator can load and unload or alter modules on the programmable network device remotely. However, there is no mention of a billing server that can track charges and bill on a per port basis.

There is no motivation or suggestion to combine Vairavan and Webb et al. and "common sense" would discourage the combination. In paragraph 4 of the background of Webb et al., there is an assertion that prior art solutions to alleviate network computing system bottlenecks are to spend more money and add more hardware. Adding the integrated networking device of Vairavan is contrary to the purpose of the Webb et al. invention that advocates a more efficient use of computing system resources (paragraph 55). The Examiner argues that the test of obviousness is what the combined teachings of the references would have suggested (Office Action, page 16), but "[i]t is improper to combine references where the references teach away from their combination." (MPEP § 2145).

Accordingly, claim 16 is allowable over the cited references. Claims 17-21 depend from allowable claim 16 and, therefore, are allowable for at least this reason.

III. Conclusion

In light of the above amendments and remarks, Applicant submits that all of the pending claims are in condition for allowance. If any questions arise or issues remain, the Examiner is invited to contact the undersigned at the number listed below in order to expedite disposition of this application. Reconsideration and allowance of pending claims 1-7 and 9-21 is respectfully solicited.

Respectfully submitted,

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